REMARKS

Claims 1-51 are pending in the present application. In the Office Action, claims 1-51 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Horejsi, et al (U.S. Patent No. 5,239,487) in view of Lamey, et al. (U.S. Patent No. 6,408,219). The Examiner's rejections are respectfully traversed.

To establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Horejsi describes a manufacturing rework station 100 that provides an operator with a graphical environment that aids in diagnosing and repairing defects in a manufactured article. The manufacturing rework station 100 includes a monitor 224 that monitors repair actions and may generate warning messages when defects rise above a critical level. See Horejsi, col. 5, 1l. 34-60 and Figure 2. However, Horejsi does not teach or suggest initiating an automatic corrective action in response to a rework rate being greater than a predetermined threshold, as set forth in independent claims 1, 13, 21, 25, 37, 45, and 49-51.

Larney describes a yield enhancement system that organizes defect classification and attribute information into a global classification scheme. However, Larney is completely silent with regard to controlling a manufacturing process based upon a rework rate associated with workpieces processed in a tool. Accordingly, Larney does not teach or suggest <u>initiating an automatic corrective action in response to a rework rate being greater than a predetermined threshold</u>. For at least this reason, Applicants respectfully submit that the cited references fail to teach or suggest all the limitations of the present invention.

Moreover, Applicants respectfully submit that the cited references provide no suggestion or motivation to modify the reference or to combine reference teachings. To the contrary, at

least one of the references teaches away from the present invention. Horejsi teaches that a limit is placed on the number of times an individual card may be reworked in order to avoid infinite looping between testing and rework of the card. If this limit is exceeded, the card is scrapped. See Horejsi, col. 10, ll. 36-41 and Figure 9. Scrapping the card is not a corrective action in any sense, as it merely results in discarding the card. Thus, Horejsi teaches away from initiating an automatic corrective action in response to a rework rate being greater than a predetermined threshold. For example, Horejsi teaches away from determining a value of the control state variable in response to the rework rate being greater than a predetermined threshold, as set forth in claims 13, 21, 37, 45, 50, and 51. It is by now well established that teaching away by the prior art constitutes prima facie evidence that the claimed invention is not obvious. See, inter alia, In re Fine, 5 U.S.P.Q.2d (BNA) 1596, 1599 (Fed. Cir. 1988); In re Nielson, 2 U.S.P.Q.2d (BNA) 1525, 1528 (Fed. Cir. 1987); In re Hedges, 228 U.S.P.Q. (BNA) 685, 687 (Fed. Cir. 1986).

For at least the aforementioned reasons, Applicants respectfully submit that the Examiner has failed to make a *prima facie* case that the present invention is obvious over Horejsi in view of Lamey. Applicants respectfully request that the Examiner's rejections of claims 1-51 under 35 U.S.C. 103(a) be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

Mark W. Sincell Ph.D.

Reg. No. 52,226

Williams Morgan & Amerson, P.C. 10333 Richmond Avenue, Suite 1100

Houston, TX 77042 (713) 934-7000

(713) 934-7011 (Fax)

AGENT FOR APPLICANTS